

said microchip including a non-volatile memory component,
said microchip including a DSP, and
said microchip including a component which provides a power management
function of said personal computer; and
a wireless network connection mechanism configured to connect said personal
computer to said network,
said network including an Internet.

131. (Not Amended) The personal computer of claim 130, wherein said wireless
network connection mechanism is substantially located on said microchip.

132. (Not Amended) The personal computer of claim 130, wherein said network
includes a World Wide Web.

133. (Not Amended) The personal computer of claim 130, wherein substantially all
of said personal computer is located on said microchip.

134. (Not Amended) The personal computer of claim 130, wherein said second
personal computer is idled by a personal user.

135. (Not Amended) The personal computer of claim 130, wherein said shared
operation includes the provision and use of shared services by at least said personal computer
and said second computer,

wherein a respective portion of said shared operation is allocated between at least said
personal computer and said second computer by an allocation mechanism.

136. (Not Amended) The personal computer of claim 135, wherein said shared services involve compensation.

137. (Not Amended) The personal computer of claim 136, wherein said compensation is financial.

138. (Not Amended) The personal computer of claim 135, wherein said shared services include shared file resources.

139. (Not Amended) The personal computer of claim 135, wherein said shared services include parallel processing.

140. (Not Amended) The personal computer of claim 135, wherein said shared services include multi-tasking.

141. (Not Amended) The personal computer of claim 135, wherein said shared services include distributed processing.

142. (Not Amended) The personal computer of claim 130, wherein a random access memory (RAM) located on said microchip comprises a non-cache memory.

143. (Not Amended) The personal computer of claim 130, wherein said network includes an Internet Service Provider.

144. (Amended) The personal computer of claim 130, wherein said wireless network connection mechanism is configured to process a wireless signal that is dense wave division multiplexed (DWDM).

145. (Not Amended) The personal computer of claim 130, wherein said network includes a network server computer.

146. (Not Amended) The personal computer of claim 130, wherein said network includes an Intranet.

147. (Not Amended) The personal computer of claim 130, wherein said microchip includes a firewall.

148. (Not Amended) The personal computer of claim 147, wherein said microchip includes a firewall configured to protect a single microprocessor.

149. (Not Amended) The personal computer of claim 148, wherein said microprocessor firewall denies all access to said microprocessor by said network.

150. (Not Amended) The personal computer of claim 130, wherein said personal computer is intended for personal use by at least one of an individual owner and a leaser of said personal computer.

151. (Not Amended) The personal computer of claim 130, wherein said personal computer includes a connection from said personal computer to said network, said connection

having a speed of data transmission that is greater than a peak data processing speed of said personal computer.

152. (Not Amended) The personal computer of claim 130, wherein said personal computer is controlled by a user of said personal computer through a wireless controller operated by said user.

153. (Not Amended) The personal computer of claim 130, wherein said network includes a network server computer.

154. (Not Amended) The personal computer of claim 130, wherein said microchip substantially provides a graphics function of said personal computer.

155. (Not Amended) The personal computer of claim 130, wherein said microchip includes a modem component of said personal computer.

156. (Not Amended) The personal computer of claim 130, wherein said microchip substantially provides a sound function of said personal computer.

157. (Not Amended) The personal computer of claim 130, wherein said microchip includes a component which substantially provides a video function of said personal computer.

158. (Not Amended) The personal computer of claim 130, wherein said microchip includes a magnetic memory component of said personal computer.

159. (Not Amended) The personal computer of claim 130, wherein said microchip includes a BIOS (basic input/output system) component of said personal computer.

160. (Not Amended) The personal computer of claim 159, wherein said BIOS is located on a flash memory component of said personal computer.

161. (Not Amended) The personal computer of claim 130, wherein said microchip includes a system bus of said personal computer.

162. (Not Amended) The personal computer of claim 130, wherein said microchip includes a transponder.

163. (Not Amended) The personal computer of claim 130, wherein said personal computer includes one of a handheld personal digital assistant, a wearable computer, an entertainment device, a video game, a videocam, an optical data recording device, a radio, a camera, a household electronic device, and a business electronic device.

164. (Not Amended) The personal computer of claim 163, wherein said entertainment device includes one of a television and a digital set-top control box.

165. (Not Amended) The personal computer of claim 163, wherein said optical data recording device includes one of a compact disc (CD) and a digital video disk (DVD) player/recorder.

166. (Not Amended) The personal computer of claim 130, wherein said personal computer includes one of a digital computer, an analog computer, and a neural computer.

167. (Not Amended) The personal computer of claim 130, wherein a system bus of said personal computer includes a hierarchical connection architecture between at least some of said microprocessors.

168. (Not Amended) The personal computer of claim 167, wherein said system bus includes a binary tree network architecture between at least some of said microprocessors.

169. (Not Amended) The personal computer of claim 167, wherein said network includes a hierarchical connection architecture between at least some of a plurality of personal computers in said network.

170. (Not Amended) The personal computer of claim 169, wherein said network defaults to a binary tree network architecture.

171. (Not Amended) The personal computer of claim 130, wherein said personal computer includes a direct optical fiber connection to said microchip.

172. (Not Amended) The personal computer of claim 130, wherein at least some of said microprocessors have a non-superscalar architecture.

173. (Not Amended) The personal computer of claim 130, wherein said microchip is connected to a hard disk drive controlled by said microchip.

174. (Not Amended) The personal computer of claim 130, wherein said microchip includes an electromechanical component.

175. (Not Amended) The personal computer of claim 130, wherein said microchip includes active configuration of an integrated circuit of said microchip.

176. (Not Amended) The personal computer of claim 175, wherein said microchip includes a field-programmable gate array.

177. (Not Amended) The personal computer of claim 130, wherein said network includes a network architecture to connect a plurality of personal computers, said network architecture being dynamically configured by said personal computers based at least in part on one of a processing requirement of a shared operation performed in said network and a data requirement associated with said shared operation.

178. (Not Amended) The personal computer of claim 130, wherein said microchip includes a component which substantially provides an encryption function of said personal computer.

179. (Not Amended) The personal computer of claim 130, wherein said personal computer includes an encryption microchip.

180. (Not Amended) The personal computer of claim 130, wherein said personal computer includes a telephone.

181. (Not Amended) The personal computer of claim 180, wherein said second computer is a personal computer.

182. (Not Amended) The personal computer of claim 130, wherein said non-volatile memory component includes a flash memory component.

183. (Not Amended) The personal computer of claim 182, wherein said personal computer is substantially contained on said microchip, said microchip comprising a system on a chip.

184. (Not Amended) The personal computer of claim 130, wherein said microchip includes more than one said microprocessor, exclusive of said DSP.

185. (Not Amended) The personal computer of claim 184, wherein at least two of said microprocessors are used for parallel processing.

186. (Not Amended) The personal computer of claim 130, wherein said personal communications device includes a pager.

187. (Not Amended) The personal computer of claim 130, wherein said personal computer is mobile.

188. (Not Amended) The personal computer of claim 130, wherein an operating system of said personal computer is Linux.

189. (Not Amended) The personal computer of claim 130, wherein said wireless network connection mechanism is configured to make a direct wireless connection to said second personal computer, said direct wireless connection being made without a network server or router.

190. (Not Amended) The personal computer of claim 130, wherein said personal computer is configured for a substantially continuous wireless network connection.

191. (Not Amended) The personal computer of claim 130, wherein said personal computer includes an optical fiber network connection mechanism configured to connect said personal computer to said network and to process a fiber optic signal that is wave division multiplexed.

192. (Not Amended) The personal computer of claim 130, wherein said optical fiber network connection mechanism is configured to process a fiber optic signal that is wave division multiplexed.

193. (Not Amended) The personal computer of claim 130, wherein said personal computer includes a network computer.

194. (Not Amended) The personal computer of claim 130, wherein said personal computer includes one of an automobile, a transportation device, and a robot.

195. (Not Amended) The personal computer of claim 130, wherein said microchip includes an application-specific integrated circuit (ASIC).

196. (Not Amended) The personal computer of claim 130, wherein said microchip includes a firewall configured to protect at least a portion of said non-volatile memory component.

197. (Not Amended) The personal computer of claim 130, wherein said personal computer and said second computer both have a substantially homogeneous PC architecture.

198. (Amended) A personal computer configured to operate as a mobile wireless personal communications device in a network including computers, the personal computer comprising:

a microchip,

said microchip including a microprocessor, exclusive of a digital signal processor (DSP),

said microchip including a non-volatile memory component,

said microchip including a wireless network connection mechanism configured to connect said personal computer to said network,

said network including an Internet, and

said microchip including a component which provides a power management function of said personal computer.

199. (Not Amended) The personal computer of claim 198, wherein said personal computer includes a telephone.

200. (Not Amended) The personal computer of claim 198, wherein said wireless network connection mechanism is substantially located on said microchip.

201. (Amended) A personal computer configured to operate as a mobile wireless personal communications device in a network including computers, the personal computer comprising:

a microchip,

said microchip including a plurality of microprocessors, exclusive of a digital signal processor (DSP),

said microchip including a non-volatile memory component,

said microchip including an analog communications component, and

said microchip including a component which provides a power management function of said personal computer; and

a wireless network connection mechanism configured to connect said personal computer to said network,

said network including an Internet.

202. (Not Amended) The personal computer of claim 201, wherein said personal computer includes a telephone.

203. (Not Amended) The personal computer of claim 201, wherein said wireless network connection mechanism is substantially located on said microchip.

204. (Amended) A personal computer configured to operate as a mobile wireless personal communications device in a network including computers, the personal computer comprising:

a microchip,

said microchip including a microprocessor, exclusive of a digital signal processor (DSP),

said microchip including a flash memory component,

said microchip including a DSP, and

said microchip including a component which provides a power management function of said personal computer; and

a wireless network connection mechanism configured to connect said personal computer to said network,

said network including an Internet.

205. (Not Amended) The personal computer of claim 204, wherein said personal computer includes a telephone.

206. (Not Amended) The personal computer of claim 204, wherein said wireless network connection mechanism is substantially located on said microchip.

207. (Amended) A personal computer configured to operate as a mobile wireless personal communications device in a network including computers, the personal computer comprising:

a microchip,

said microchip including a microprocessor, exclusive of a digital signal processor (DSP),

said microchip including a non-volatile memory component,

said microchip including active configuration of an integrated circuit of said microchip, and

said microchip including a component which provides a power management function of said personal computer; and

a wireless network connection mechanism configured to connect said personal computer to said network,

said network including an Internet.

208. (Not Amended) The personal computer of claim 207, wherein said personal computer includes a telephone.

209. (Not Amended) The personal computer of claim 207, wherein said wireless network connection mechanism is substantially located on said microchip.

210. (Amended) A personal computer configured to operate as a mobile wireless personal communications device in a network including computers, the personal computer comprising:

a microchip,

said microchip including a microprocessor, exclusive of a digital signal processor (DSP),

said microchip including a non-volatile memory component,

said microchip including a field-programmable gate array (FPGA), and

said microchip including a component which provides a power management function of said personal computer; and
a wireless network connection mechanism configured to connect said personal computer to said network,
said network including an Internet.

211. (Not Amended) The personal computer of claim 210, wherein said personal computer includes a telephone.

212. (Not Amended) The personal computer of claim 210, wherein said wireless network connection mechanism is substantially located on said microchip.

213. (Amended) A personal computer configured to operate as a mobile wireless personal communications device in a network including computers, the personal computer comprising:

a microchip,
said microchip including a microprocessor, exclusive of a digital signal processor (DSP),
said microchip including a non-volatile memory component, and
said microchip including a component which provides a power management function of said personal computer; and
a wireless network connection mechanism configured to connect said personal computer to said network,
said network including an Internet,

said wireless network connection mechanism including a capability to make a wireless connection to said second personal computer through at least one wireless link, and

said wireless connection being made without a network server or router.

214. (Not Amended) The personal computer of claim 213, wherein said personal computer includes a telephone.

215. (Not Amended) The personal computer of claim 213, wherein said wireless network connection mechanism makes said wireless connection to said second personal computer through only one wireless link.

216. (Not Amended) The personal computer of claim 213, wherein said wireless network connection mechanism includes a capability to make a wireless connection to a third personal computer through only one wireless link, such that said third personal computer has a wireless connection to said second personal computer through said personal computer.

217. (Not Amended) The personal computer of claim 213, wherein said wireless network connection mechanism is substantially located on said microchip.

218. (Amended) A personal computer configured to operate as a mobile wireless personal communications device in a network including computers, the personal computer comprising:

a microchip,

said microchip including a plurality of microprocessors, exclusive of a digital signal processor (DSP),

said microchip including a non-volatile memory component, and

said microchip including a component which provides a power management function of said personal computer; and

a wireless network connection mechanism configured to connect said personal computer to said network,

said network including an Internet.

219. (Not Amended) The personal computer of claim 218, wherein said personal computer includes a telephone.

220. (Not Amended) The personal computer of claim 218, wherein said wireless network connection mechanism is substantially located on said microchip.

221. (Not Amended) A personal computer configured to operate as a mobile wireless personal communications device in a network including computers, the personal computer comprising:

a microchip,

said microchip including a microprocessor, exclusive of a digital signal processor (DSP),

said microchip including a non-volatile memory component,

said microchip including a DSP, and

said microchip including a component which provides a power management function of said personal computer; and

a wireless network connection mechanism configured to connect said personal computer to said network,

said network including an Internet and a World Wide Web.

222. (Not Amended) The personal computer of claim 221, wherein said personal computer includes a telephone.

223. (Not Amended) The personal computer of claim 221, wherein said wireless network connection mechanism is substantially located on said microchip.

224. (Amended) A personal computer configured to operate as a mobile wireless personal communications device in a network including computers, the personal computer comprising:

a microchip,

said microchip including a microprocessor, exclusive of a digital signal processor (DSP),

said microchip including a non-volatile memory component,

said microchip including a DSP, and

said microchip including a component which provides a power management function of said personal computer; and

a wireless network connection mechanism configured to connect said personal computer to said network,

said network including an Internet.

225. (Not Amended) The personal computer of claim 224, wherein said personal computer includes a telephone.

226. (Not Amended) The personal computer of claim 224, wherein said wireless network connection mechanism is substantially located on said microchip.

227. (Amended) A personal computer configured to operate as a mobile wireless personal communications device in a network including computers, the personal computer comprising:

- a microchip,

- said microchip including a microprocessor, exclusive of a digital signal processor (DSP),

- said microchip including a non-volatile memory component,

- said microchip including an application-specific integrated circuit (ASIC), and

- said microchip including a component which provides a power management function of said personal computer; and

- a wireless network connection mechanism configured to connect said personal computer to said network,

- said network including an Internet.

228. (Not Amended) The personal computer of claim 227, wherein said personal computer includes a telephone.

229. (Not Amended) The personal computer of claim 227, wherein said wireless network connection mechanism is substantially located on said microchip.

Kindly see the attached Appendix for the changes made to effect the above claims.

Kindly add new claims 230-249 as follows:

230. (New) The personal computer of claim 130, wherein said wireless network connection mechanism is configured to process a wireless signal that includes multiplexing.

231. (New) The personal computer of claim 130, wherein said wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

232. (New) The personal computer of claim 198, wherein said wireless network connection mechanism is configured to process a wireless signal that includes multiplexing.

233. (New) The personal computer of claim 198, wherein said wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

234. (New) The personal computer of claim 201, wherein said wireless network connection mechanism is configured to process a wireless signal that includes multiplexing.

235. (New) The personal computer of claim 201, wherein said wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

236. (New) The personal computer of claim 204, wherein said wireless network connection mechanism is configured to process a wireless signal that includes multiplexing.

237. (New) The personal computer of claim 204, wherein said wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

238. (New) The personal computer of claim 207, wherein said wireless network connection mechanism is configured to process a wireless signal that includes multiplexing.

239. (New) The personal computer of claim 207, wherein said wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

240. (New) The personal computer of claim 210, wherein said wireless network connection mechanism is configured to process a wireless signal that includes multiplexing.

241. (New) The personal computer of claim 210, wherein said wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

242. (New) The personal computer of claim 213, wherein said wireless network connection mechanism is configured to process a wireless signal that includes multiplexing.

243. (New) The personal computer of claim 213, wherein said wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

244. (New) The personal computer of claim 218, wherein said wireless network connection mechanism is configured to process a wireless signal that includes multiplexing.

245. (New) The personal computer of claim 218, wherein said wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

246. (New) The personal computer of claim 224, wherein said wireless network connection mechanism is configured to process a wireless signal that includes multiplexing.

247. (New) The personal computer of claim 224, wherein said wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

248. (New) The personal computer of claim 227, wherein said wireless network connection mechanism is configured to process a wireless signal that includes multiplexing.

249. (New) The personal computer of claim 227, wherein said wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).